UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,607	12/19/2001	Kenneth W. Aull	NG(MS)7191	3015

26294   7590   10/06/2006

TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.
1300 EAST NINTH STREET, SUITE 1700
CLEVEVLAND, OH 44114

EXAMINER
KHOSHNOODI, NADIA

ART UNIT	PAPER NUMBER
2137	

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/027,607	AULL ET AL.
	Examiner	Art Unit	
	Nadia Khoshnoodi	2137	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>08 September 2006</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1 and 3-20</u> is/are pending in the application.

    4a) Of the above claim(s) <u>2</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1 and 3-20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>6/23/2005</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All · b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claims 1 and 3-20 are pending. Applicant's arguments/amendments with respect to previously presented claims 1 & 3-20 filed 9/8/2006 have been fully considered but are not persuasive. The Examiner would like to point out that this action is made Final (See MPEP 706.07(a)).

Response to Arguments

Applicants contend that the combination of "Burn and Carlsson fail to teach or suggest reviewing, by a Tokenizing Officer, credentials of the user and forwarding the user ID number and token ID number to a CMS system along with an electronic form request and a signature of the Tokenizing Officer, wherein the Tokenizing Officer comprises a person." Examiner respectfully disagrees. Carlsson et al. disclose a CA administrator who reviews the user's credentials and fills out a request on behalf of the user, and transmits the user ID number and a token ID number to a CA Centre after signing the form (col. 8, lines 12-37). Applicants added emphasis on the term "token ID number" and contend that this particular element is not forwarded. Examiner would like to point out that a sequence number of the certificate request is included and forwarded (col. 8, lines 34-37), i.e. forwarding the token ID number. Furthermore, Carlsson et al. suggest that one would modify the method as disclosed in Burn in order to add a Tokenizing Officer who is a person in order to add the advantage of physically checking the users' credentials in order to ensure that the users are who they claim to be (col. 8, lines 20-27). Thus, the Carlsson et al. in combination with Burn teach/suggest "reviewing, by a Tokenizing Officer, credentials of the user and forwarding the user ID number and token ID number to a

CMS system along with an electronic form request and a signature of the Tokenizing Officer, wherein the Tokenizing Officer comprises a person" as recited in the claims.

Applicants further contend, "nothing in Carlsson et al. teaches or suggests limiting the number of personalized cards that any one user can possess." Examiner would like to point out that this limitation is not present in the claim (no use of the term "card" only "token"). So, with respect to redundant tokens, which may be a certificate in one form, Carlsson et al. teach that when the user role changes, in order to ensure that there are no redundancies, the particular certificate is revoked so that the user does not have multiple certificates for various roles that they have performed in the past (col. 9, lines 14-17). Thus, when a user is obtaining a certificate, the certificate is unique for that user for their specific role (where a role is equivalent to the department/occupation that the user has and is bound to a unique public key of a public-private key pair to ensure that the user is uniquely identified) (col. 9, line 29 – col. 10, line 31). Furthermore, in another aspect of Carlsson et al., a feature for protection against playback must be implemented by a distributed CA, which also ensures no duplicates (col. 11, lines 25-33).

Due to the reasons stated above, the Examiner maintains rejections with respect to previously presented claims 1 and 3-20. Burn substantially teaches the limitations that the Applicant suggests distinguish from the prior art. Furthermore, Carlsson in combination with Burn teach the limitations not explicitly disclosed by Burn. Therefore, it is the Examiner's conclusion that the claims are not patentably distinct or non-obvious over the prior art of record as presented.

Claim Rejections - 35 USC § 103

I.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

II.   Claims 1 and 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burn,

United States Pub. No. 2003/0005291 and further in view of Carlsson et al., US Patent No.

6,490,367.

As per claim 1:

Burn substantially teaches a token issuance and binding process comprising: providing a

plurality of tokens, each token having a unique ID number stored therein (par. 6, lines 1-7 and

par. 37, lines 1-3); generating a unique public/private key pair for each token (par. 36, lines 8-

15); storing each token ID number and corresponding public key in a directory/database (par. 36,

lines 16-19); storing each private key in its respective token (par. 36-37 and table 1, field name

"User Certificate"); and binding a unique ID number of a user to a corresponding one of the

plurality of tokens by storing said correspondence there between in the directory/database (par.

36-37 and fig. 5, element 140).

Not explicitly disclosed is reviewing, by a Tokenizing Officer, credentials of the user and

forwarding the user ID number and the token ID number to a CMS (Certificate Management

System) along with an E-form (electronic form) request and signature of the Tokenizing Officer,

wherein the Tokenizing Officer comprises a person. However, Carlsson et al. teach reviewing,

by a Tokenizing Officer, credentials of the user and forwarding the user ID number and the token

ID number to a CMS (Certificate Management System) along with an E-form (electronic form)

request and signature of the Tokenizing Officer, wherein the Tokenizing Officer comprises a

person (col. 8, lines 12-51). Therefore, it would have been obvious to a person in the art at the

time the invention was made to modify the method disclosed in Burn to add a Tokenizing

Officer, who is a person, to review credentials of a user and to forward the user information to a

CMS along with an electronic request form and Tokenizing Officer's signature. This

modification would have been obvious because a person having ordinary skill in the art, at the

time the invention was made, would have been motivated to do so since Carlsson et al. suggest

that having a person as the Tokenizing Officer is easy to administer and adds to security because

the credentials are checked by someone who is acquainted with the users so it is harder to forge

an identity in the binding process in col. 8, lines 20-27.

As per claim 3:

Burn and Carlsson et al. substantially teach the process as applied to claim 1 above. Not

explicitly disclosed is the binding further comprising the CMS checking for redundant user

tokens and revoking any such user tokens. However, Carlsson et al. teach revoking tokens of

individuals when their role has changed in order to do away with redundant certificates, i.e. so

that one user does not have two valid certificates with different roles especially when one of the

roles has been revoked. Therefore, it would have been obvious to a person in the art at the time

the invention was made to modify the method disclosed in Burn to incorporate the ability to

check and revoke any such tokens that are not distinct. This modification would have been

obvious because a person having ordinary skill in the art, at the time the invention was made,

would have been motivated to do so since Carlsson et al. teach that it is important that

certificates that are invalid are revoked in order to prevent from users gaining access to various

objects that they are no longer authorized for in col. 9, lines 14-20.

As per claim 4:

Burn and Carlsson et al. substantially teaches the process as applied to claim 3 above.

Furthermore, Carlsson et al. teach the binding further comprising the CMS filling in the E-form

from its directory/database and forwarding the filled in E-form to the Tokenizing Officer (col. 8,

lines 28-37).

As per claim 5:

Burn and Carlsson et al. substantially teaches the process as applied to claim 4 above.

Furthermore, Carlsson et al teach the binding further comprising the Tokenizing Officer

reviewing data in filled in E-form and comparing against user credentials and returning same to

CMS after signing (col. 8, lines 12-27).

As per claim 6:

Burn and Carlsson et al. substantially teach the process as applied to claim 5 above.

Furthermore, Burn teaches generating and wrapping at least a signature certificate/private and

associated private key for the user in the unique public key of the token and returning same to the

Tokenizing Officer (par. 44, lines 1-13). Not explicitly disclosed is the binding further

comprising the CMS validating the Tokenizing Officer's signature. However, Burn teaches that

when the CA receives a message from the HTP it must be decrypted, hence verified. Therefore,

it would have been obvious to a person in the art at the time the invention was made to modify

the method disclosed in Burn to incorporate the ability to validate the HTP's signature. This

modification would have been obvious because a person having ordinary skill in the art, at the

time the invention was made, would have been motivated to do so since Burn suggests that

validating the Tokenizing Officer's signature is important to ensure that a valid Tokenizing

Officer is supplying the user information in par. 44, lines 1-5.

As per claim 7:

Burn and Carlsson et al. substantially teach the process as applied to claim 6 above.

Furthermore, Burn teaches the binding further comprising the Tokenizing Officer storing the

signature certificate/private key for the user in the token (par. 44, lines 14-21).

As per claim 8:

Burn and Carlsson et al. substantially teach the process as applied to claim 7 above. Not

explicitly disclosed is the binding further comprising the user unwrapping the signature

certificate/private key using the token private key stored in the token. However, Burn teaches

the HTP unwrapping the signature certificate/private key stored in the token. Therefore, it would

have been obvious to a person in the art at the time the invention was made to modify the method

disclosed in Burn to instead have the user unwrap the information in the token. This

modification would have been obvious because a person having ordinary skill in the art, at the

time the invention was made, would have been motivated to do so since Burn suggests that in

order to use the certificate it must be able to be decrypted by the private key stored in the token,

which is stored therein to ensure that the private key is kept confidential and will not be

compromised in par. 44, lines 14-21.

As per claim 9:

Burn and Carlsson et al. substantially teach the process as applied to claim 1 above. Not

explicitly disclosed by Burn is the process wherein providing a plurality of tokens comprises

providing a plurality of USB (Universal Serial Bus) tokens. However, Burn teaches the use of a

hardware token that could be implemented in various ways. Therefore, it would have been

obvious to a person in the art at the time the invention was made to modify the method disclosed

in Burn to have the hardware tokens comprise of USB tokens. This modification would have

been obvious because a person having ordinary skill in the art, at the time the invention was

made, would have been motivated to do so since Burn suggest that any type of hardware token

can be used in par. 46.

As per claim 10:

Burn teaches the process as applied to claim 1 above. Not explicitly disclosed by Burn is

the process wherein providing a plurality of tokens comprises providing a plurality of smart

cards. However, Burn teaches that a smartcard could be used in an alternate embodiment.

Therefore, it would have been obvious to a person in the art at the time the invention was made

to modify the method disclosed in Burn to have the hardware tokens comprise of smartcards.

This modification would have been obvious because a person having ordinary skill in the art, at

the time the invention was made, would have been motivated to do so since Burn suggests that

any type of hardware token can be used, for example a smart card, in par. 31.

As per claim 11:

The limitations in claim 11 are similar in scope to the limitations disclosed in claim 1,

thus it is rejected for the same reasons since it is merely the system that implements the rejected

method claim.

As per claims 12-20:

The limitations in claims 12-20 are similar in scope to the limitations disclosed in claims

3-10, thus it are rejected for the same reasons since they are merely components of the system

that implement the rejected method claims.

References Cited, Not Used

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

1. U.S. Patent No. 5,943,423
2. U.S. Patent No. 6,438,550

The above references have been cited because they are relevant due to the manner in which the

invention has been claimed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nadia Khoshnoodi whose telephone number is (571) 272-3825.

The examiner can normally be reached on M-F: 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Nadia Khoshnoodi
Examiner
Art Unit 2137
10/2/2006

NK

EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER